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ABSTRACT

Secondary schools have traditionally looked to higher education for guidance and leadership, yet they might do better looking elsewhere. Instead of teaching being considered a plum, it is considered a burden, and outstanding faculty may be lured to an institution with the promise of no undergraduate classes. Colleges base their reputation often on the achievement of their graduates, ignoring the fact that their selective admission policies practically assure the success of a good portion of their students who already possess all the needed attributes before they even enter college. Arguments against open admission policies include the fear of lowering academic standards, but academic standards should not be measured by the number of educationally superior students admitted, but by the success the institution has in educating its students for life and in contributing to the students' personal development. Procedures should be established for evaluating institutions and their effectiveness should be measured by taking into account the students' initial level of performance and improvement in performance over time. Evaluation of faculty members is also essential, and one way would be to administer a departmental test to all students taking a particular course and to apply multiple criteria of performance, including the progress the individual student has made. (AF)

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Is "Higher" Education Really "Better" Education?

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Much of the difficulty in communication between secondary and higher education can be traced to a fundamental difference in objectives: Whereas the business of the high school is primarily education, that purpose is often of only minor importance in many higher institutions and is even denigrated in some.

Higher education's relative indifference to its educational responsibilities is perhaps best illustrated by the criteria used in recruiting and promoting university faculty. Younger and less experienced faculty frequently complain about their "high teaching loads": twelve semester hours, nine semester hours, or whatever. (Even the use of the term load in this context is revealing. Does one ever hear a faculty member speak of his research load?)

Outstanding performance by young faculty is ordinarily assessed in terms of the quality and quantity of his scholarly output and is "rewarded" by a reduction in course load.

These values are even more apparent in the recruiting techniques of most universities. The promising young candidate is wooed on the basis that he will have to teach "only" six hours of undergraduate courses. The prestigious candidate for a distinguished professorship is told that he will not be expected to do any undergraduate teaching, though perhaps he may teach a graduate seminar in his speciality -- "if you want to." The point here is that low teaching assignments (or no teaching at all) are regarded as positive incentives by both employer and potential employee.

Consider for a moment how ludicrous a typical recruiting talk with a new Ph.D. would sound if the current values were reversed: "We recognize that

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you are very interested in a career in teaching undergraduates, and we want to give you every opportunity to realize your ambitions. But in view of your lack of experience in teaching, we will allow you to teach just one course at first, and that will be under the close supervision of a senior faculty member. If you prove that you are an able teacher under these conditions, we may let you teach two courses during your second or third year. If you eventually develop into a really outstanding teacher, you can be assured of an early promotion to the rank of associate professor (with tenure), and you will be allowed then to teach nine or perhaps even twelve hours of courses. You must realize, of course, that when you start, you will be limited to teaching advanced undergraduates and that you will be allowed to teach beginning undergraduates only after you have clearly demonstrated your competence."

Many colleges have managed to create the impression that they are effective educational institutions by pointing to the vocational successes of their alumni: the number who obtain advanced degrees, the number listed in Who's Who, and so forth. What these colleges fail to acknowledge, of course, is that selective admissions practices virtually guarantee highly successful graduates, even if the institution does nothing more than to provide the student with access to good books and give him some time to read them. A substantial body of research[1] has shown, in fact, that an institution's output of distinguished alumni depends far more on its ability to attract superior and highly motivated students than on any benefits derived from the educational environment of the college itself. Moreover, some very prestigious colleges actually appear to be "underproductive" of distinguished alumni when the high quality

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[1]Kenneth A. Feldman and Theodore M. Newcomb, The Impact of College on Students, 2 vols. (San Francisco: Jossey-Bass, 1969).

of their student inputs is taken into consideration.[2] The eagerness of most colleges, in the face of such evidence, to take credit, if you will, for the achievements of their alumni suggests to me that they are concerned more with creating the impression of high-quality educational programs than with developing truly effective programs.

The secondary schools have a much harder time hiding their educational mistakes. Most public high schools, for example, cannot apply selective admissions standards to eliminate those students likely to do poorly. Unless, through the efforts of the high school, they can be brought up to certain minimal levels of performance, the school usually gets blamed.

The Importance of Admissions

Perhaps the key difference between the practices of secondary education and of higher education is the admissions process. Whereas most public high schools are basically "open-door" institutions, most colleges -- including many of the public ones -- have traditionally admitted only those applicants with the best grades and the highest scores on standardized achievement tests. Among other things, this process of selective admissions has created a kind of institutional status hierarchy, with a few highly selective "centers of excellence" at the top, a substantial middle class of moderately selective "good" colleges, and a very large group of public two-year colleges and unselective private colleges at the bottom.

Although educators have developed elaborate rationales for this hierarchical arrangement, it is probably safe to say that the system is

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[2]Alexander W. Astin, "'Productivity' of Undergraduate Institutions," Science, 136, pp. 129-35; "Differential College Effects on the Motivation of Talented Students to Obtain the Ph.D.," Journal of Educational Psychology, 54, 1962, pp. 63-71.

perpetuated not for educational reasons but in the interests of competition and status. Faculty support selective admissions because they feel that bright students are easier and more fun to teach; indeed, even in a given institution or a given classroom, professors probably favor their smartest and most intellectually curious students. Alumni, legislators, faculty, administrators, and probably many of the students themselves support selective admissions because having only the "best" students enhances the institution's prestige. Many college administrators support selective admissions because a sizable input of ambitious and talented students will almost ensure a substantial output of alumni who will be distinguished and possibly wealthy in years to come. Even the secondary schools support the institutional pecking order that results from selective admissions because they see it as a reward or incentive system inducing their students to do well; teachers and guidance counselors frequently urge their charges to "study hard so you can get into a 'good' college."

But what are the educational justifications for the institutional hierarchy? Is there any validity to the idea that this arrangement is more efficacious than some other sort of arrangement as far as the teaching mission of the system is concerned?

Perhaps the most common educational justification for ability tracking is the assumption that the student will develop better academically if he is grouped with students of similar ability. This assumption carries with it several important corollaries: (1) that the brighter student needs the stimulation and the competition of other bright students if he is to realize his full potential, (2) that the brighter student will become bored and apathetic if he is grouped with students of lesser ability, and (3) that the mediocre student will become

intimidated and discouraged if he is forced to compete with bright students. Although so far embarrassingly little research has been done to test these assumptions, the available evidence suggests that students attending a highly selective institution receive little or no intellectual "value added."[3] By the same token, the bright student does not appear to suffer intellectually if he attends a college of average or even below-average selectivity.[4] Although these studies cannot be regarded as the final word on the question of the effects of selectivity on intellectual development, they do suggest that some of our cherished assumptions about the value of attending a highly selective institution need to be reexamined.

Opponents of open admissions commonly argue that any watering down of the merit criterion would result in lowering an institution's "academic standards." While such a consequence is indeed possible, it is by no means inevitable. The traditional view is that academic standards are determined primarily by the abilities of the students who are admitted. This bit of folklore may apply to institutions that grade strictly on the curve, but there is no reason why colleges cannot set any standards they wish, independent of their admissions practices. Academic standards have to do with the performance that the institution demands of a student before it will certify that he has passed certain courses or completed certain requirements for the degree. It is true that fewer students are likely to succeed (be certified) if very high performance levels are required at the same time that admissions criteria are

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[3]See Alexander W. Astin, "Undergraduate Achievement and Institutional 'Excellence,'" Science, 161, 1968, pp. 661-68; Robert C. Nichols, "Effects of Various College Characteristics on Student Aptitude Test Scores," Journal of Educational Psychology, 55, 1964, pp. 45-54; and Donald A. Rock, John A. Centra, and Robert L. Linn, "Relationships Between College Characteristics and Student Characteristics," American Educational Research Journal, 7, 1970, pp. 109-22.

[4]Astin, 'Undergraduate Achievement and Institutional 'Excellence.'"

relaxed. Nevertheless, standards of performance can still be defined and maintained whatever changes are made in the admissions process.

If one accepts the idea that colleges have a primary responsibility for educating students, then the model of selective admissions based on test scores and grades is clearly inappropriate. If an educational institution exists to educate students, then its mission is to produce certain desirable changes in the student or, more simply, to make a difference in the student's life. Given these goals, a college should strive in its admissions practices to select those applicants who are most likely to be favorably <u>influenced</u> by the particular educational program offered at the institution. Instead, the typical admissions officer today functions like a handicapper: He tries merely to pick winners. He looks over the various candidates, evaluates their respective talents, and attempts to select those who are most likely to perform well. Handicappers, it should be stressed, are interested only in <u>predicting</u> the horse's performance, not in helping it to run better and faster. The irony here is that an educational institution should function not like a handicapper but like a jockey or a trainer: It has the responsibility of improving the performance of the student, not just of identifying those individuals with the greatest potential.

In another sense, college admissions officers tend to operate like personnel managers in a commercial enterprise rather than like educators. Picking winners is an appropriate activity for businesses and industries, since their goal is to hire the very best talent in the interests of maximum productivity and profit. Similarly, competition among rival companies for the limited pool of available talent is consistent with the very nature of business. But the business model -- which has been adopted by all too many institutions --

is not appropriate to education. The mission of the college is not simply to maximize its output of distinguished alumni by enrolling as many talented students as possible. Such a static process reduces the college to a kind of funnel: What comes out is purely a matter of what goes in. Colleges and other educational institutions exist in order to change the student, to contribute to his personal development, to make a difference. The personnel manager, looking for applicants who can help the company, is performing his proper function; the admissions officer, seeking students who will eventually enhance the reputation of the college, is not. He should be looking for applicants whom the institution can help.

Unfortunately, some secondary schools are trying to emulate the elistist practices of the colleges. Quite a number of private schools, for example, and even a few public ones, practice selective admissions based on the applicant's past academic performance and competitive examinations. And almost all these schools are generally regarded as being of outstanding quality, even though there is no direct evidence that they have any more favorable effect on their students that the nonselective high schools do. A much larger number -- including most of the large public high schools located in the suburbs of large cities -- attach considerable importance to indices of "quality" such as the proportion of graduates who go on to college or the proportion who win scholarships. For instance, the number of students who win awards in the annual National Merit Scholarship competition is widely used as an index of the "academic excellence" of a secondary school. The problem with such measures, of course, is that they again fail to take into account the abilities and past achievements of the students when they first entered the school. Since most entering high school students from affluent suburban backgrounds have already

chalked up some impressive achievements, it is no wonder that high schools located in such communities turn out relatively large numbers of National Merit Finalists. So again, we simply do not know whether students who attend these schools actually have more "value added" to their intellectual development than do students who attend other types of schools.

Unquestioning reliance on these possibly spurious -- and certainly unproven -- measures of quality has implications for higher education that are even more profound than for secondary education. Most high schools are not in a position to compete with each other for talented students or to select their students from applicants. Many colleges, on the other hand, are in a position to strengthen their reputations for academic excellence simply be selecting only the brightest applicants. In addition to its increased prestige, the institution having a highly select student clientele often gains a variety of more practical advantages: Faculty are easier to recruit, funds are easier to raise, and so forth.

In many respects, the process of selective admissions permits colleges and universities to operate on what might be called a passive philosophy of education. Students are admitted with the expectation that they will "pass" certain prescribed courses and eventually "graduate" with a college degree. To reduce the possibility that students will not "pass," the less able are simply excluded from the institutions; those few "unqualified" students who manage to slip through the admissions net and who subsequently perform below their classmates are "flunked out."

In contrast, most elementary and secondary schools take a much more activist and interventionist stance. Students likely to have difficulty in mastering certain tasks are not screened out beforehand, nor are those who

experience such difficulties eliminated from the system ("flunked out"). On the contrary, the elementary and secondary schools assume a responsibility for educating all their students, regardless of ability or past achievement. At worst, the dull or poorly-prepared student is accepted as an unavoidable burden; at best, he is regarded as a challenge. In either case, the public elementary and secondary schools nearly always accept all comers and attempt to develop educational programs that are suited to a diversity of student abilities and interests. This job is not always easy, to be sure. But when programs fail, most secondary schools try to revise them, rather than to jettison those students who do not fit into the programs.

It is sometimes argued that an open admissions policy will impose new educational burdens on colleges and universities that they are "not equipped to handle." Yet most secondary schools and even a few of the largest state systems of higher education in the United States have for many years been operating on what is essentially a policy of open admissions. Moreover, several hundred private colleges have (not out of choice but necessity) traditionally enrolled students in the lower ability ranges, students who in many respects closely resemble those who enter the system under a program of open admissions. For that matter, many of the great state universities in this country have been able to accommodate students at all levels of ability without apparent ill effects. Such institutions have, to be sure, instituted a kind of track system within their curricular programs, but because these programs have operated within a single institution, many of the social and political problems that result from an institutional hierarchy have been blunted. A single institution can accommodate a wide range of student ability by establishing curricular programs similar to the ungraded primary system

found in many elementary schools. Confining these programs to a single institution also facilitates easy and rapid transfer of students across and within various curricular tracks.

Evaluation of Institutions

The differing commitments of secondary schools and colleges to the task of education can also be seen in the relative importance that each assigns to a systematic evaluation of their programs. Few, if any, systems of public colleges do any research to determine their impact on students. (Some individual public and private colleges have on occasion participated in such studies, but most of them have been reluctant to make the findings public.) Many secondary school systems, by contrast, routinely attempt to evaluate their educational efforts by means of standardized achievement tests, and the results are usually made public. Unfortunately, however, most such attempts do not go far enough and, as a result, produce information that is ambiguous and even misleading.

Typically, the so-called evaluation study in a public secondary school system involves administering standardized tests to the seniors and comparing their average scores with the average scores of students at other schools and with national averages. That such comparisons can be seriously misleading is obvious when one realizes that the students' performance level when they first enter at the ninth or tenth grade level may vary substantially from one school system to another or even from school to school within a single system. Again, we are confronted with the failure to take input into account. Thus, a school which may seem to be inferior, in that the test scores of its students fall below the national average, may in fact be doing a very good job, considering the relatively poor past records of the students when they entered as tenth

graders. On the other hand, a school whose seniors score very high may have done very little educationally for its students, in view of their already high level of performance in junior high school. The point here is that an evaluation system that relies only on the students' final achievement level as evidence of a school's relative effectiveness may fail to recognize schools that are doing an outstanding job with below-average students and consequently may confer underserved rewards on schools that are doing a mediocre job with above-average students.

Clearly, what is needed here are procedures of evaluation which take into account the students' initial level of performance and which use as their yardstick for measuring a school's educational effectiveness improvements in performance over time. Unless such longitudinal data are collected, the typical evaluation -- involving one-shot achievement testing -- is probably more honored in the breach than the observance.

Evaluation of Faculty Members

Much of the difficulty involved in making college teaching a desirable activity lies in the lack of any trustworthy means to determine how well the individual faculty member does his job. While "everyone" avers that college teaching is important, very few agree as to how good and bad teachers can be identified. This lack of evaluative information not only permits incompetent teachers to continue practicing their mistakes but also prevents some of the most effective ones from receiving appropriate recognition and reward.

Our failure to develop acceptable evaluative techniques is in part a consequence of the professor's natural resistance to having his activities scrutinized, and in part a consequence of difficulties inherent in the evaluative process itself. Paradoxically, whatever public demand there might be for

faculty accountability is party satisfied by the publish-or-perish dictum. Because measures of performance in scholarship and research are readily available, the development of better measures of teaching performance have been neglected. Until very recently, the general public (and even most faculty) were willing to accept the idea that the professor who excels in research activities must almost by definition also excel in teaching.

Although there are many possible measures of the effectiveness of the professor's teaching, the sine qua non of effective teaching is how the professor affects his students. And yet many professors object to evaluation on the grounds that the more meaningful outcomes of their efforts cannot be measured. While it is true that some aspects of the student's development are difficult to assess objectively, many of them can be measured with a reasonable degree of precision: his ability to speak and write English and a foreign language, to manipulate mathematical symbols, to choose intelligently among alternatives, and to communicate ideas; his knowledge of history, current events, science, the arts, and other areas of factual information.

Part of the resistance to objective measurement of student performance probably derives from a kind of snobbishness about instrumental or practical outcomes. Many academics regard development of the student's measurable skills as a low-level function, hardly worth their effort. While legitimate arguments in support of educational objectives other than purely instrumental ones can certainly be made, educators often forget that many students attend colleges and enroll in courses with the expectation that they will receive instrumental returns on their investment of time and money. For this reason alone, some attempt to assess these outcomes is imperative.

Overcoming Faculty Resistance

The potential threat of objective evaluation may blind many faculty to the considerable value that evaluative data can have for their own teaching activities. If one accepts the idea that knowledge of results is an important aid to learning, then it follows that a given professor can improve his teaching techniques if he has access to objective information about how they affect his students. Such information is useful both in the graduate training and the on-the-job training of teaching faculty.

Of all forms of faculty resistance to evaluation, perhaps the most difficult to cope with and that thwarts many attempts at evaluation is the one which springs from the conviction that no objective assessment is capable of capturing the "true essence" of what happens to the student as a result of the instructor's efforts. Rating scales, achievement tests, and similar devices are attacked on the grounds that they dehumanize the student and fail to detect the subtle changes that take place. Although hostility to such measures is most common among faculty in the humanities, similar attitudes may crop up among faculty in almost any discipline, including the "hard" sciences. Professors in the natural sciences, for example, may object to the use of multiple-choice tests on the grounds that they measure only superficial knowledge and thus overlook the student's true depth of understanding of scientific phenomena.

When resistance of this type develops, it is important to sort out those objections which are purely defensive from those which are based on valid concerns about the appropriateness of the measurement instrument. One obvious approach to solving the problem is to shift the responsibility from the psychometrician or evaluation specialist to the professor himself. Thus,

faculty members can, and indeed should, be asked to participate actively in developing measurement techniques. Professors who object to such methodologies as the multiple-choice examination should be encouraged to devise essay examinations, oral examinations, and other methods which seem to them more appropriate in assessing the student's development. Even at this point, however, a few professors may refuse to cooperate on the grounds that <u>their</u> special impact on the students "cannot be objectified." In essence, this attitude puts the professor in the unique position of being his own judge and jury. Faculty performance, under these conditions, is self-validating.

One of the most potentially useful evaluative techniques is the departmental examination: that is, a test that would be administered to all students taking a particular course in a given department. Such an examination represents one way of reconciling the need for objective assessment of faculty performance with the instructor's legitimate concern over the appropriateness of evaluative criteria. It is difficult, then, to understand why this device is not in more common use. Perhaps the competitive implications of directly comparing individual members of a department on the basis of how well their students do are simply too threatening. Another reason may be that different faculty members emphasize different aspects of a course, and their differing emphases may lead to differences of opinion about what type of material should be included in the departmental test. For example, in an introductory course in psychology, the experimental psychologist may feel that half of the items should involve experimental problems, but his colleagues may feel that no more than one-fourth of the items is a more proper proportion. It is likely that many attempts at establishing departmental examinations have run aground on the rocks of such disputes. Disagreements of this nature may

well represent the main obstacle to developing some single overall measure of faculty performance.

But in many ways, the single-criterion approach is unrealistic. Even within a particular course in a particular department, professors and students alike differ in the importance they attach to different subtopics. Given these conditions, the only reasonable approach is to develop multiple criteria of performance. Thus, in the construction of a departmental examination, certain proportions are assigned to various subspecialties within the department. Each student's performance scores are then computed separately for each subspecialty. To protect the individual professor, it might even be desirable to give each member of the department absolute control over a small fraction of the items; the students' performance on these items could also be reported separately. The point here is simply that any evaluation of teaching competence must take into account legitimate differences in the pedagogic objectives of different instructors. One would certainly hope that these objectives would overlap both among faculty and between students and faculty, but the important differences should be identified and measured.

The need for multiple evaluative criteria applies not only to the content covered by the examination but also to its method. In addition to various types of "objective" examinations (e.g., multiple-choice, matching, fill-in), such devices as essays, interviews, testimonials (student evaluations), and even the student's success in subsequent courses of study should be considered as possible instruments of evaluation.

Some Methodological Problems

Inherent in any system of objective evaluation is the danger that comparative data may be misleading because each faculty member deals with a

different group of students. Even within the same department at an institution, for example, the students in one section of a course may be more talented or more motivated initially than students in another section taught by a different professor. Thus, the more talented group will tend to perform better, even if the two professors are equally effective teachers.

In short, measuring student performance at the end of a particular course is not sufficient and may lead to erroneous conclusions. Rather, it is essential to measure changes in performance by testing the student before and after his exposure to the course. With appropriate statistical controls, these repeated measures make it possible to get a relatively unbiased measure of comparative teaching effectiveness.

The student himself benefits from such measures of change in that they provide him with a valuable source of objective informational feedback which today is too often nonexistent. Turning again to the concept of knowledge of results, one can see that the student is handicapped by a lack of knowledge about his own educational progress. Course grades are inadequate, because they show only his position relative to his peers, not his absolute level of performance. Just because a student gets a low grade in a course, it does not follow that he has learned nothing; it means only that his level of performance at a particular point in time is below that of his peers. By the same token, the student who gets a high grade may not have learned anything as a result of the course; the high grade means only that his level of performance at the end of the semester is above that of his peers. By contrast, objective evaluative measures administered before, during and after a particular course will give the student a much better notion of what he has learned and how he is progressing.

Alternative Uses of Evaluation

No matter how objective and comprehensive the evaluative measures, and no matter how actively the faculty member participates in their development, he may still regard them as a threat if they are used as a means of rewarding good performance through promotion, the granting of tenure, increases in salary, or simply public recognition. In view of this hostility, administrators should consider introducing evaluative measures purely for informational purposes: that is, the results of repeated measurements of student performance would be made available to the professor and the students involved but to no one else. They would not be used for administrative purposes. At worst, the professor might simply ignore the information; at best, he might use it as a basis for revising his pedagogical techniques. Faculty could also be encouraged, but not required, to make these data public. If the threats of evaluative assessment could be thus reduced, its potential value as a learning device for both faculty and students might be realized. Indeed, the faculty might eventually accept the idea that administrative decisions about rank, tenure, and salary should be based on such decisions.

Evaluating High School Teachers

Much of what I have said here about the need for better methods of evaluating college faculty apply with equal force to the high school teacher. The critical difference, of course, is that the scholarship function makes it possible for many college faculty to neglect their teaching responsibilities (or do no teaching at all) and at the same time to enjoy both material rewards and high regard by their peers; the secondary school teacher ordinarily has no such alternative. Nonetheless, if college faculty can be made to accept evaluative assessment of teaching performance, it is more likely to be incorporated

at the secondary level and its concomitant benefits will accrue to high school as well as college teachers and would eventually, one would hope, result in more effective teaching.

Conclusion

My emphasis on the tendency of many higher educational institutions and college professors to ignore their educational function is not meant to suggest that this dereliction holds true for all. Many professors and even some institutions give top priority to teaching. The problem here is that those institutions that undervalue teaching ability -- the research-oriented universities -- are the same institutions that screen and train each new generation of university and college teachers. Thus, the system is self-perpetuating.

One must remember also that most secondary school teachers and administrators are trained by these same universities or by colleges whose faculties come from them. Among other unfortunate consequences of this situation, undergraduates majoring in secondary education soon learn that teachers colleges rank close to the bottom of the institutional status hierarchy and that the field of education is looked down on within institutions. In these circumstances, it is hardly surprising that secondary school personnel tend to feel inferior and to look to higher education for guidance and leadership. "Higher" education is naturally taken to mean "better" education. Thus much valuable criticism of higher education that might come from the secondary schools is either ignored or never expressed at all.

My critique has focused primarily on higher education, because I feel strongly that higher education has come to disparage its educational mission

and that solutions to most of the problems of articulation between the two levels require major changes at the higher level. Much of the pressure for change, however, can come from the secondary schools, particularly if their leaders come to recognize more clearly some of the anomalies in the higher system. Although secondary education has traditionally truckled to the higher sector, it can also be a powerful influence on higher education. Secondary schools are, after all, about the only source of new clients for colleges and universities, as well as being one of the principal consumers of its products. These two channels -- the guidance of college-bound students and the hiring of new teachers -- probably offer the best opportunity for the secondary schools to bring about changes at the higher level.

Those secondary school administrators who tend to regard higher education as a model for their own practices might be well advised to look elsewhere, possibly even to some of the more innovative elementary schools. At the same time, it is important that if the secondary schools are to provide better guidance for their own students, they should begin to urge the colleges and universities to collect and make public useful evaluative information on their educational programs. By encouraging students to choose their colleges from among those institutions that are willing to provide such information, secondary schools could probably influence other colleges to follow suit.